

IN THE CLAIMS:

Please amend claims 11 and 18 as follows:

11. The optical signal monitoring method of claim 9, wherein the non-linear compensation formula is expressed as:

A1

$$\lambda = x + (x - X_1)(x - X_2) \sum_{m=0}^M \sum_{n=0}^N c_{m,n} x^m t^n Ax + (x - X_1)(x - X_2) P_{MN}(x, t) \dots (10)$$

where  $\lambda$  is the non-linear compensated wavelength,  $x$  is the linear approximated wavelength,  $X_1$  is a first predetermined wavelength,  $X_2$  is a second predetermined wavelength,  $M$  is an arbitrary integer,  $N$  is an arbitrary integer,  $c_{m,n}$  is an  $(m, n)^{\text{th}}$ -order non-linear coefficient, and  $t$  is the product of the driving voltage related with  $x$  and the operation temperature of the filter.

18. The optical signal monitoring apparatus of claim 16, wherein the non-linear compensation formula is expressed as:

A2  
Cont.

$$\lambda = x + (x - X_1)(x - X_2) \sum_{m=0}^M \sum_{n=0}^N c_{m,n} x^m t^n Ax + (x - X_1)(x - X_2) P_{MN}(x, t) \dots (13)$$

where  $\lambda$  is the non-linear compensated wavelength,  $x$  is the linear approximated wavelength,  $X_1$  is a first predetermined wavelength,  $X_2$  is a second predetermined wavelength,  $M$  is an arbitrary integer,  $N$  is an arbitrary integer,  $c_{m,n}$  is an  $(m, n)^{\text{th}}$ -order non-